

Switch-disconnector, DMM, 160 A, 4 pole, With black rotary handle and drive shaft



Part no. **DMM-160/4**
6093346

General specifications		
Product name		Eaton DMM Switch-disconnector
Part no.		DMM-160/4
EAN		8711426741881
Product Length/Depth		155 millimetre
Product height		115 millimetre
Product width		137 millimetre
Product weight		0.975 kilogram
Certifications		IEC/EN 60204 CE RoHS IEC/EN 60947-3 IEC/EN 60947 Lloyds KEMA VDE 0660 EAC
Product Tradename		DMM
Product Type		Switch-disconnector
Product Sub Type		None
Catalog Notes		Rated Short-time Withstand Current (Icw) for a time of 1 second visible contacts
Features & Functions		
Features		Version as maintenance-/service switch Version as main switch
Fitted with:		Black rotary handle and drive shaft
Number of poles		Four-pole
General information		
Accessories		Auxiliary contact fitted by user. Connection materials included with supplied equipment.
Actuator color		Black
Actuator type		Short thumb-grip
Degree of protection		NEMA Other
Degree of protection (front side)		IP20
Lifespan, mechanical		10,000 Operations
Mounting method		Surface mounting
Mounting position		As required
Overvoltage category		III
Pollution degree		3
Product Category		Main switch Switch-disconnector
Rated impulse withstand voltage (Uimp)		6000 V
Safety parameter (EN ISO 13849-1)		B10d values as per EN ISO 13849-1, table C.1
Suitable for		Intermediate mounting Ground mounting Distribution board installation
Climatic environmental conditions		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		55 °C
Ambient storage temperature - min		-30 °C
Ambient storage temperature - max		80 °C
Terminal capacities		
Terminal capacity		6 - 70 mm ² , flexible with ferrules to DIN 46228

Stripping length (main cable)		21 mm
Tightening torque		7 Nm, Screw terminals
Electrical rating		
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)		10000 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)		528 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)		336 A
Rated insulation voltage (Ui)		1000 V
Rated operational current (Ie) at AC-21, 400 V, 415 V		160 A
Rated operational current (Ie) at AC-21, 500 V		160 A
Rated operational current (Ie) at AC-21, 690 V		160 A
Rated operational current (Ie) at AC-22, 380 V, 400 V, 415 V		160 A
Rated operational current (Ie) at AC-22, 500 V		160 A
Rated operational current (Ie) at AC-22, 690 V		160 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V		160 A
Rated operational current (Ie) at AC-23A, 500 V		66 A
Rated operational current (Ie) at AC-23A, 690 V		42 A
Rated operational power at AC-23A, 400 V, 50 Hz		75 kW
Rated operational power at AC-23A, 500 V, 50 Hz		45 kW
Rated operational power at AC-23A, 690 V, 50 Hz		37 kW
Rated operational power at AC-3, 380/400 V, 50 Hz		0 kW
Rated operational voltage (Ue) at AC - max		690 V
Rated uninterrupted current (Iu)		160 A
Uninterrupted current		Rated uninterrupted current Iu is specified for max. cross-section.
Short-circuit rating		
Breaking current		13.7 kA
Let-through energy		Max. 134 kA ² s
Rated conditional short-circuit current (Iq)		30 kA at 415 V 50 kA
Rated short-time withstand current (Icw)		2,5 kA, Contacts, 1 second 2.5 kA
Short-circuit protection rating		125, Fuse, Contacts
Contacts		
Number of auxiliary contacts (change-over contacts)		0
Number of auxiliary contacts (normally closed contacts)		0
Number of auxiliary contacts (normally open contacts)		0
Design verification		
Equipment heat dissipation, current-dependent Pvid		8 W
Heat dissipation capacity Pdis		0 W
Heat dissipation per pole, current-dependent Pvid		7.4 W
Rated operational current for specified heat dissipation (In)		160 A
Static heat dissipation, non-current-dependent Pvs		0 W
10.2.2 Corrosion resistance		Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures		Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat		Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects		Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation		Meets the product standard's requirements.
10.2.5 Lifting		Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact		Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions		Meets the product standard's requirements.
10.3 Degree of protection of assemblies		Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances		Meets the product standard's requirements.
10.5 Protection against electric shock		Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components		Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections		Is the panel builder's responsibility.
10.8 Connections for external conductors		Is the panel builder's responsibility.

10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material		Is the panel builder's responsibility.
10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Switch disconnecter (low voltage) (EC000216)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss13-27-37-14-03 [AKF060018])		
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current Iu	A	160
Rated permanent current at AC-23, 400 V	A	140
Rated permanent current at AC-21, 400 V	A	160
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current Icw	kA	2.5
Rated operation power at AC-23, 400 V	kW	75
Switching power at 400 V	kW	0
Conditioned rated short-circuit current Iq	kA	50
Number of poles		4
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Built-in device fixed built-in technique
Suitable for floor mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		Yes
Suitable for intermediate mounting		Yes
Colour control element		Black
Type of control element		Short thumb-grip
Interlockable		No
Type of electrical connection of main circuit		Screw connection
With pre-assembled cabling		No
Degree of protection (IP), front side		IP20
Degree of protection (NEMA)		Other
Width	mm	137
Height	mm	115
Depth	mm	155
Width in number of modular spacings		6

